In the claims:

**Claim 1 (currently amended).** A method for producing a metal chelate comprising the steps of:

providing a sufficient amount of at least one amino component;

providing a sufficient amount of at least one sugar component;

providing a sufficient amount of at least one metal component; and,

mixing said sufficient amounts of said amino component, sugar component, and metal salt component with water for a sufficient time and at a sufficient temperature to form a soluble metal chelate containing solution where the chelate is a Maillard Reaction Product.

**Claim 2 (original).** The method of claim 1 further comprising the steps of evaporating the soluble metal chelate containing solution; thereafter drying to form a dried metal chelate; and, milling to form a powder of dried metal chelate.

**Claim 3 (currently amended).** The method of claim 1 where:

said amino component is selected from the group consisting of glycine, lysine, glutamic and other amino acids, dipeptides, polypeptides, protein hydrolizates, milk solids, cream, egg solids, gelatin, and whey proteins;

said sugar component is selected from the group consisting of ~~glucose,~~ sucrose, ~~mono- and~~ disaccharides, dextrose, high fructose corn syrup, starches, maltodextrins; and,

said metal component is selected from the group consisting of salts, hydroxides and oxides of calcium, manganese, magnesium, copper, zinc, cobalt, chromium, potassium, and iron.

**Claim 4 (currently amended).** The method of claim 2 where:

said amino component is selected from the group consisting of glycine, lysine, glutamic and other amino acids, dipeptides, polypeptides, protein hydrolizates, milk solids, cream, egg solids, gelatin, and whey proteins;

said sugar component is selected from the group consisting of ~~glucose,~~ sucrose, ~~mono- and~~ disaccharides, dextrose, high fructose corn syrup, starches, maltodextrins; and,

said metal component is selected from the group consisting of salts, hydroxides and oxides of calcium, manganese, magnesium, copper, zinc, cobalt, chromium, potassium, and iron.

**Claim 5 (original).** A method for producing a metal chelate comprising the steps of:

providing a sufficient amount of at least one amino component;

providing a sufficient amount of at least one sugar component;

providing a sufficient amount of at least one metal component;

providing a sufficient amount of at least one oxidizing compound; and,

mixing said sufficient amounts of amino component, sugar component, oxidizing compound and metal component with water for a sufficient time and temperature so that said sugar present is substantially oxidized thereby forming metal chelates in a soluble metal chelate containing solution.

**Claim 6 (original).** The method of claim 5 further comprising the steps of evaporating the soluble metal chelate containing solution; thereafter drying to form a dried metal chelate; and, milling to form a powder of dried metal chelate.

**Claim 7 (currently amended).** The method of claim 5 where:

said amino component is selected from the group consisting of glycine, lysine, glutamic and other amino acids, dipeptides, polypeptides, protein hydrolizates, milk solids, cream, egg solids, gelatin, and whey proteins;

said sugar component is selected from the group consisting of ~~glucose,~~ sucrose, ~~mono- and~~ disaccharides, dextrose, high fructose corn syrup, starches, maltodextrins;

said metal component is selected from the group consisting of salts, hydroxides and oxides of calcium, manganese, magnesium, copper, zinc, cobalt, chromium, potassium, and iron; and,

said oxidizing compound is selected from the group consisting of hydrogen peroxide, hypochlorides, periodites, air, and oxygen.

**Claim 8 (currently amended).** The method of claim 6 where:

said amino component is selected from the group consisting of glycine, lysine, glutamic and other amino acids, dipeptides, polypeptides, protein hydrolizates, milk solids, cream, egg solids, gelatin, and whey proteins;

said sugar component is selected from the group consisting of ~~glucose;~~ sucrose, ~~mono- and~~ disaccharides, dextrose, high fructose corn syrup, starches, maltodextrins;

said metal component is selected from the group consisting of salts, hydroxides and oxides of calcium, manganese, magnesium, copper, zinc, cobalt, chromium, potassium, and iron; and,

said oxidizing compound is selected from the group consisting of hydrogen peroxide, hypochlorides, periodites, air, and oxygen.

**Claim 9 (currently amended).** A method for producing a metal chelate comprising the steps of:

providing an amino component selected from the group consisting of: glycine, lysine, glutamic and other amino acids, dipeptides, polypeptides, protein hydrolizates, milk solids, cream, egg solids, gelatin, and whey proteins;

providing a sugar component selected from the group consisting of: ~~glucose,~~ sucrose, ~~mono- and~~ disaccharides, dextrose, high fructose corn syrup, starches, maltodextrins;

providing a metal component selected from the group consisting of salts, hydroxides and oxides of calcium, manganese, magnesium, copper, zinc, cobalt, chromium, potassium, and iron;

combining said amino component and said sugar component in water to form a solution and mix at atmospheric pressure for a sufficient time and temperature to form a solubilized Maillard Reaction Product solution;

thereafter, adding said metal component to said Maillard Reaction Product solution and mix at atmospheric pressure for a sufficient time and temperature to form a solubilized metal chelate solution; and,

evaporating said solubilized metal chelate solution to yield a metal chelate, drying said metal chelate to form a dried metal chelate; and, milling to form a metal chelate powder.

**Claim 10 (original).** The method of claim 9 where a sufficient amount of an oxidizing compound is added to said solution containing said amino component and said sugar component to form a solubilized Maillard Reaction Product solution.

**Claim 11 (original).** The method of claim 10 where said oxidizing compound is selected from the group consisting of hydrogen peroxide, hypochlorides, periodites, air, and oxygen.